

REMARKS

Favorable consideration and allowance of claims 17-31 are respectfully requested in view of the foregoing amendments and the following remarks.

Claims 17-31 were rejected 35 U.S.C. § 103(a) as being obvious over Elsherif et al (US 5,564,124). Applicant respectfully traverses the rejection as set forth below.

Claim 17 is amended to include an “air leakage prevention means for preventing air leakage from a hemline portion of said guide sheet simultaneously serving as the garment.” Support for this amendment is present, for example, in the specification at paragraphs [0020]-[0021]. Additionally, claim 17 is amended to claim that the air flow space between the guide sheet and the undergarment or wearer’s body is produced automatically. Support for this amendment is present, for example, in paragraphs [0025] and [0032].

Applicant submits that Elsherif does not teach or suggest an “air leakage prevention means for preventing air leakage from a hemline portion of said guide sheet simultaneously serving as the garment” or that “the or each parallel airstream generation means cooperatively blows air of a total amount of about 10 m³/H to 500 m³/H into between said guide sheet and an undergarment or wearer’s body to cause positive pressures between said guide sheet and the undergarment or wearer’s body to thereby automatically produce an air flow space therebetween.” Since the invention according to claim 17 is provided with

these features, the large amount of air blown in substantially parallel in between the guide sheet and the undergarment or wearer's body causes positive pressures between the guide sheet and the undergarment or wearer's body to thereby inflate the guide sheet and to automatically produce an air flow space. Then the air is discharged to the outside not from a hemline portion of a cooling suit but from a collar portion or a sleeve portion of the cooling suit. See, e.g., air exits 4 in FIG. 1. Therefore, in the cooling suit of the invention of the present application, since the outside air taken into the cooling suit is discharged from the collar portion or the sleeve portion as if it surrounds the body of the wearer by the guide sheet, its cooling effect can be improved compared to the conventional cooling suit.

Also, since the cooling suit of the invention of the present application cools the human body by having the outside air flow between the guide sheet and the undergarment or the human body and can also produce the air flow space automatically, without using a spacer or the like, in order to ensure the air flow space, the structure is simplified and the suit can be manufactured inexpensively. See, e.g., paragraph [0032] of the specification.

The examiner states that the feature "to cause positive pressures between said guide sheet and the undergarment or wearer's body to thereby produce an air flow space therebetween" in claim 17 is described in col. 4, lines 36 to 39 of Elsherif. However, the air flow space of the present invention and the space in

which air flows in Elsherif are totally different from each other in their configurations.

In Elsherif, the garment 10 has inner layers 18 and outer layers 20, and porous material pads 34, 36, 38, 40, 42 (col. 3, line 21 and col. 3, lines 64 to 67). Edges of the inner layers 18 and the outer layers 20 which are impervious to air are joined together, and flat surfaces of the pads are sealed by the inner layers 18 and the outer layers 20 (col. 4, lines 5 to 7 and col. 5, lines 44 to 46). Here, a part of the inner layer is cut so that a predetermined portion of the pad is exposed (col. 4, lines 8 to 9). The blower unit 11 supplies air to interior of the garment 10 between the inner layers 18 and the outer layers 20 (col. 3, lines 55 to 57), and the air supplied to the interior space is discharged from the exposed pad (col. 4, lines 12 to 16). That is, the space in which air flows in Elsherif is the interior space of the garment 10 formed by the inner layers 18 and the outer layers 20. Since the inner layers 18 and the outer layers 20 are formed of a material which is impervious to air, the air flowing through the interior space of the garment does not touch the body but touches the body for the first time when the air is discharged from the pad. Thereby, the portion of the body faced with the pad is cooled by the air discharged from the pad.

Elsherif's pad is located at an end portion of the space in which air flows, and it plays a role not only of discharging the air but also of preventing the garment 10 from squeezing in on the wearer when the blower unit 11 is in

operation and maintaining the shape of the garment 10 (col. 5, lines 12 to 20). Thus, in Elsherif, the pad is an essential constituent element of the garment 10.

By contrast, the air flow space of the present invention is a space between the garment simultaneously serving as the guide sheet and the undergarment or wearer's body (paragraphs [0022] and [0025]). Thus, the air in the air flow space flows in the air flow space while being in contact with the wearer's body directly or the body through the undergarment all the time. Namely, the undergarment or the wearer's body is one element that forms the air flow space. Also, in the present invention, the garment (guide sheet) can be constituted by only one layer. Moreover, in the present invention, unlike Elsherif, no such thing as a pad is provided at all.

As mentioned above, in Elsherif, the space in which air flows is not produced by causing positive pressures between the garment and the undergarment or wearer's body but the space in which air flows is produced by causing positive pressures between the inner layers and the outer layers of the garment. Thus, the air flow space of the present invention and the space in which air flows in Elsherif are totally different from each other in their configurations.

Also, this difference appears as a difference in the cooling effect between the present invention and Elsherif. That is, in the present invention, since the air taken in from the outside flows in the air flow space so as to surround the

body of the wearer by the guide sheet, that is, to be in contact with the wearer's body directly or the body through the undergarment all the time, a large portion on the wearer's body in contact with the air flowing in the air flow space can be cooled. On the other hand, in Elsherif, as can be seen from the installation position of the pads, only special parts of the wearer's body can be cooled. Moreover, in Elsherif, there is no description or suggestion relating to the fact that the pads are not used or the garment is constituted by only one layer. Thus, the contents disclosed in Elsherif do not motivate one having ordinary skill in the art to form the air flow space of the present invention.

Also, the examiner states that blowing air of a total amount of about 10 m³/H to 500 m³/H is self-evident for one having ordinary skill in the art. However, the inventor of the present application conceived a new air flow space not disclosed in Elsherif and found out that when the air flow space is applied to the cooling suit, by blowing air of a total amount of at least about 10 m³/H into between the guide sheet and the undergarment or wearer's body, the air flow space can be automatically produced between the guide sheet and the undergarment or wearer's body. See, e.g., paragraphs [0022] and [0033]. That is, by blowing air of a total amount of at least about 10 m³/H into between the guide sheet and the undergarment or wearer's body the air flow space can be automatically produced without using a spacer, which is not described in Elsherif. The upper limit value (air of a total amount of about 500 m³/H) of the

air flow amount is determined considering workability of the wearer and the like. See, e.g., paragraph [0033]. Thus, the matter relating to the air flow amount is one of the technical features of the present invention that is not present in the prior art and would not be derived from the prior art, since the prior art requires the use of a spacer to provide its air flow. Accordingly, the claimed air flow amounts would not have been obvious to one of ordinary skill in the art.

Moreover, in the present invention, by providing air leakage prevention means for preventing air leakage from a hemline portion of the guide sheet simultaneously serving as the garment, the air taken in from the outside is not discharged from the hemline of the cooling suit but discharged to the outside from a collar portion or a sleeve portion of the cooling suit. In this way, by providing the air leakage prevention means for preventing air leakage from a hemline portion of the garment, the inside of the cooling suit can be easily made into positive pressures with a small air blow amount so as to cool the wearer. The air leakage prevention means of the present invention is not disclosed or suggested at all in Elsherif.

Therefore, Applicant submits that claim 17 is patentable over Elsherif.

Claims 18 to 31 are patentable due to their dependence from claim 17.

In view of the foregoing, Applicant submits that the application is in condition for allowance and such action is earnestly solicited.

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If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #101539.57354US).

Respectfully submitted,

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